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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,562	08/30/2001	Ronald P. Doyle	RSW920010161US1	2522

7590 06/23/2005	EXAMINER
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ART UNIT	PAPER NUMBER
2151	

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Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)
Office Action Summary	09/943,562	DOYLE ET AL.
	Examiner	Art Unit	
	KAMAL B. DIVECHA	2151	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>04/15/2005</u>.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>45-80,82-99 and 101</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>45-80,82-99 and 101</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Response to Arguments

Claims 45-80, 82-99 and 101 are pending in this Action.

Applicant has cancelled claim 81 and 100 and added claim 101.

Applicant has amended claims 45-80 and 82-99; therefore the examiner withdraws

previous 35 USC 112, 2nd paragraph rejections and objections.

Applicant's arguments with respect to claims 45-80, 82-99 and 101 have been considered

but are moot in view of the new ground(s) of rejection.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
subject matter which the applicant regards as his invention.

1.   Claims 46, 73-79, 94, 96-99 and 101 are rejected under 35 U.S.C. 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention.

Claim 46 recites the limitation "the method according to claim 45, wherein evaluating

predetermined criteria to see if the stored object should be served from the intelligent storage

system through a recipient of the received request comprises....", however claim 45 has been

amended to recite the limitation "evaluating the request based on criteria". Therefore, claim 45

does not contain the limitation "evaluating predetermined criteria..." and should be reflected in

all the other claims

Claim 73 recites the limitation "the intelligent system" in the claim. There is insufficient

antecedent basis for this limitation in the claim.

Regarding claim 74, 94, 96, 99 and 101 the phrase "may be" renders the claim indefinite

because it is unclear whether the limitations following the phrase are part of the claimed

invention. It is unclear whether creating a redirect link on one or more web servers from which

the particular object may be requested or may not be requested based on the criteria. See MPEP

§ 2173.05(d).

Claims 75-79 and 97-98 are rejected due to their dependency on claims 74 and 96.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2.   Claims 45-49, 51, 53-56, 60-61, 63-72, 74-78, 80, 82-94 and 96-99 are rejected under 35

U.S.C. 103(a) as being unpatentable over Hu (hereinafter Hu, U.S. Patent No. 6,173,322 B1) in

view of Blumenau et al. (hereinafter Blumenau, U. S. Patent No. 6,421,711 B1).

As per claim 45, Hu discloses a method of serving objects in a computing network, the

method comprising: receiving a request for an object stored on an intelligent storage system, the

request being received by a web server (fig. 4 block #404 and fig. 2 block #202); evaluating the

request based on criteria (fig. 4 item #406 and col. 7 L53-63); if the criteria are met, redirecting

the request to the content server (every server has a control unit, col. 5 L45-47, col. 12 L35-49);

and if criteria are not met, serving the stored object via the web server (col. 11 L48-59),

however, Hu does not explicitly disclose a system wherein the intelligent storage system

comprises a plurality of storage devices and a control unit configured to determine a mapping for

the request to one of the plurality of storage devices.

Blumenau, from the same field of endeavor, discloses an intelligent storage system

comprising a plurality of storage devices and a control unit configured to determine a mapping

for the request to the one of the plurality of storage devices (fig. 1 item #28-31, item #27, fig. 21

item #246, fig. 22 item #269, col. 2 L 48-55, col. 7 L21-39). Therefore, it would have been

obvious to a person of ordinary skilled in the art at the time the invention was made to modify

Hu by incorporating the teaching of Blumenau as stated above (i.e. implementing storage system

of Blumenau with Hu's system or replacing a group of content server in Hu's with the storage

system of Blumenau) in order to implement in the system the intelligent storage system

comprising plurality of storage devices and a control unit configured to determine a mapping for

the request to the one or more of the plurality of storage devices.

One of ordinary skilled in the art would have been motivated because: first it would have

reduced the increasing cost of management by reducing number of storage objects to be

managed, secondly the storage controller would have controlled access to the data storage

(Blumenau, col. 1 L18 to col. 2 L45), and third it would have provided an efficient storage

system with increased storage capacity.

As per claim 46, Hu discloses the process of informing a sender of the received request

that a subsequent connection to the control unit should be established for serving the stored

object when the selected criteria are met (col. 6 L14-22; col. 13 L45-47; col. 12 L43-48; col. 18

L47-51).

As per claim 47, Hu discloses the process wherein the subsequent connection bypasses

the web server (col. 12 L35-52).

As per claim 48, Hu discloses the process wherein informing a sender of the received

request that a subsequent connection to the control unit should be established for serving the

stored object when the selected criteria arc met uses a redirect code (interpreted as the address of

the intelligent storage system) of an existing protocol (col. 11 L17-34 and col. 3 L8-10).

As per claim 49, Hu discloses the process wherein the existing protocol is Hypertext

Transfer Protocol (col. 5 L29-34; col. 6 L60-61).

As per claim 51, Hu discloses the process of requesting establishment of the subsequent

connection automatically in response to the redirect code (col. 12 L35-40).

As per claim 53, Hu discloses the process wherein evaluating the request based on

criteria comprises comparing a size of the stored object to a statically-specified number (col. 10

L1-9; col. 8 L26-38 and fig. 6 step#602).

As per claim 54, Hu discloses the process wherein the statically-specified number is

specified by an administrator using a configuration interface (col. 7 L60-62).

As per claim 55, Hu discloses the process wherein evaluating the request based on criteria comprises comparing a size of the stored object to a dynamically-determined number (fig. 6 block #204 and step #602, 604; col. 7 L53-61; col. 5 L55-67 and col. 10 L1-5).

As per claim 56, Hu discloses the process wherein the dynamically-determined number is determined in view of current network conditions (col. 9 L7-65).

As per claim 60, Hu discloses the process wherein evaluating the request based on criteria comprises determining whether a naming extension matches an element in a set of dynamically-determined set of naming extensions (fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38).

As per claim 61, Hu discloses the process wherein the dynamically-determined set of naming extensions is determined in view of current network conditions (col. 9 L7-65).

As per claim 63, Hu discloses the process wherein evaluating the request based on criteria comprises determining whether an object name matches an element in a statically-specified set of object names (fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38).

As per claim 64, Hu discloses the process wherein the statically-specified set of object names is specified by an administrator using a configuration interface (col. 7 L60-64).

As per claim 65, Hu discloses the process wherein evaluating the request based on criteria comprises determining whether an object name matches an element in a set of dynamically-determined set of object names (fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38).

As per claim 66, Hu discloses the process wherein the dynamically-determined set of object names is determined in view of current network conditions (col. 9 L7-65).

As per claim 67, Hu discloses the process wherein the predetermined criteria comprises a content type of the stored object (col. 13 L5-10).

As per claim 68, Hu discloses the process wherein evaluating the request based on criteria comprises determining whether a content type matches an element in a statically-specified set of content types (fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38).

As per claim 69, Hu discloses the process wherein the statically-specified set of content types is specified by an administrator using a configuration interface (col. 7 L53-62; col. 8 L42-59).

As per claim 70, Hu discloses the process wherein evaluating the request based on criteria comprises determining whether a content type matches an element in a set of dynamically-determined set of content types (fig. 7 block #702 and fig. 6 step #602 and col. 8 L26-38).

As per claim 71, Hu discloses the process wherein the dynamically-determined set of content types is determined in view of current network conditions (col. 9 L7-65).

As per claim 72, Hu discloses the process wherein the predetermined criteria comprises using one or more wildcards which may operate to match more than one stored object (col. 6 L53-61).

As per claim 74, Hu discloses a method of creating a link to an object, the method comprising: receiving a request for a particular object (col. 5 L29-34; col. 18 L29); evaluating characteristics of the particular object (col. 6 L62-67 and col. 8 L8-10; col. 18 L30-31); creating a redirect link on one or more web servers from which the particular object may be requested if the evaluated characteristics of the particular object meet criteria (col. 5 L41-47 and col. 12 L43-

52), the redirect link being configured to redirect the request to the content server (fig. 2 item

#212, col. 12 L35-36) and creating an object serving link on the one or more web servers if the

evaluated characteristics of the particular object do not meet the criteria (col. 6 L43-61 and col.

11 L45-59), however Hu does not disclose the process of receiving a request for a particular

object in an intelligent storage system comprising a plurality of storage devices and a control unit

configured to determine mapping for the request to one of the plurality of storage devices.

Blumenau, from the same field of endeavor, discloses the process of receiving a work request

(receiving a request for a particular object) in an intelligent storage system comprising a plurality

of storage devices and a control unit configured to determine a mapping for the request to the

one of the plurality of storage devices (fig. 33 item #382, fig. 1 item #28-31, item #27, fig. 21

item #246, fig. 22 item #269, col. 2 L 48-55, col. 7 L21-39). Therefore, it would have been

obvious to a person of ordinary skilled in the art at the time the invention was made to modify

Hu by incorporating the teaching of Blumenau as stated above (i.e. implementing storage system

of Blumenau with Hu's system or replacing a group of content server in Hu's with the storage

system of Blumenau) in order to implement in the system the intelligent storage system

comprising plurality of storage devices and a control unit configured to determine a mapping for

the request to the one or more of the plurality of storage devices. One of ordinary skilled in the

art would have been motivated because of the same reasons as set forth in claim 45.

As per claim 75, Hu discloses the process wherein the redirect link enables returning a

redirect status code to a requester of the object (col. 12 L43-52).

As per claim 76, Hu discloses the process of requesting establishment of a subsequent connection automatically in response to receiving the redirect status code for retrieving the particular object directly from the intelligent storage system (col. 12 L35-40 and col. 18 L47-51).

As per claim 77, Hu discloses the process wherein contents of the redirect link are programmatically created (col. 5 L20-22 and L40-47).

As per claim 78, Hu in view of Blumenau does not explicitly disclose the process wherein the contents of the redirect link are manually created, but it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Hu in view of Blumenau in order to create the contents of the redirect link manually. One of ordinary skilled in the art would have motivated because it would have enabled a web site developer or an administrator to redirect traffic to an appropriate destination.

As per claim 80, Hu discloses a method of serving large objects, the method comprising: receiving a request for a particular object stored on an intelligent storage system (col. 5 L29-34; col. 18 L29); creating a redirect Link on one or more web servers from which the particular object may be requested (col. 5 L41-47 and col. 12 L43-52); and serving the particular object from one of the plurality of storage devices via the control unit of the intelligent storage system using the redirect Link **or** through a selected one of the servers using the object serving Link (col. 5 L55-67 and col. 16 L65-67 to col. 17 L1-5; col. 6 L17-22), however Hu does not discloses an intelligent storage system comprising a plurality of storage devices and a control unit configured to determine mapping for the request to one of the plurality of storage devices. Blumenau, from the same field of endeavor, discloses the process of receiving a work request (receiving a request for a particular object) in an intelligent storage system comprising a plurality

of storage devices and a control unit configured to determine a mapping for the request to the

one of the plurality of storage devices (fig. 33 item #382, fig. 1 item #28-31, item #27, fig. 21

item #246, fig. 22 item #269, col. 2 L 48-55, col. 7 L21-39). Therefore, it would have been

obvious to a person of ordinary skilled in the art at the time the invention was made to modify

Hu by incorporating the teaching of Blumenau as stated above (i.e. implementing storage system

of Blumenau with Hu's system or replacing a group of content server in Hu's with the storage

system of Blumenau) in order to implement in the system the intelligent storage system

comprising plurality of storage devices and a control unit configured to determine a mapping for

the request to the one or more of the plurality of storage devices. One of ordinary skilled in the

art would have been motivated because of the same reasons as set forth in claim 45.

As per claims 82-94, 96-99, they do not teach or further define over the limitations in

claims 45-49, 51, 53-56, 60-61, 63-72, 74-78 and 80. Therefore, claims 82-94, 96-99 are rejected

for the same reasons as set forth in claims 45-49, 51, 53-56, 60-61, 63-72, 74-78 and 80.

3.   Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hu (hereinafter

Hu, U.S. Patent No. 6,173,322 B1) in view of Blumenau et al. (hereinafter Blumenau, U. S.

Patent No. 6,421,711 B1) and further in view of Dillon et al (hereinafter Dillon, U.S. Patent No.

6,658,463 B1).

As per claim 50, Hu in view of Blumenau does not explicitly disclose the process of

using the wireless session protocol. Dillon explicitly discloses a satellite communications

network including an upstream proxy server and two reporting downstream proxy servers

wherein communication takes place through a wireless satellite link using wireless session

protocol (fig. 7 and col. 12 L52-58). Therefore, it would have been obvious to a person of

ordinary skilled in the art at the time the invention was made to incorporate the teaching of

Dillon with Hu in view of Blumenau in order to order to enable communications wirelessly by

using wireless session protocol. One of ordinary skilled in the art would have been motivated

because it would have improved the transmission efficiency by providing high-speed and

continuous channel carrying packetized data (Dillon et al, col. 1 L15-21; col. 3 L38-57).

4.   Claims 73, 79, 95 and 101 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hu (hereinafter Hu, U.S. Patent No. 6,173,322 B1) in view of Blumenau et al. (hereinafter

Blumenau, U. S. Patent No. 6,421,711 B1) and further in view of Yoshida et al. (hereinafter

Yoshida, US 2002/0174307 A1).

As per claim 73, Hu in view of Blumenau does not explicitly disclose a system wherein

the intelligent storage system comprises network-attached storage. Yoshida discloses a system

comprising a network attached storage device (fig. 1 item #100 and fig. 3 item #100). Therefore,

it would have been obvious to a person of ordinary skilled in the art at the time the invention was

made to incorporate the teaching of Yoshida as stated above with Hu in view of Blumenau in

order to provide a network attached storage (NAS) system. One of ordinary skilled in the art

would have been motivated because a network attached storage device is a self-contained,

intelligent storage appliance that attaches directly to a local area network and transfers data

typically over network protocols. NAS devices would have provided shared data storage space

and would have also provided a rapidly emerging new technology for workstations and servers

(Yoshida, pg. 1 block #3).

As per claims 79 and 95, they do not teach or further define over the limitations in claim

73. Therefore, claims 79 and 95 are rejected for the same reasons set forth in claim 73.

As per claim 101, it includes the recitations of claims 74-76 and 78-79 (as admitted by an applicant in a supplemental amendment filed April 15, 2005, pg. 14). Therefore, claim 101 is rejected for the same reasons as set forth in claims 74-76 and 78-79.

5.   Claims 52 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu (hereinafter Hu, U.S. Patent No. 6,173,322 B1) in view of Blumenau et al. (hereinafter Blumenau, U. S. Patent No. 6,421,711 B1) and further in view of "Official Notice".

As per claim 52, Hu in view of Blumenau does not explicitly disclose the process wherein the predetermined criteria comprises a size of the stored object. But, it is well known and would have been obvious to a person of ordinary skilled in the art at the time the invention was made to process the request based on the rule that addresses the size of the stored object. Therefore, Official Notice is taken to indicate that the criteria includes the size of the stored object is obvious and well known in the art. One of ordinary skilled in the art would have been motivated because it would have enabled efficient filtering capabilities, which would have resulted in a robust decision making process.

As per claim 62, Hu in view of Blumenau does not explicitly disclose the process wherein the predetermined criterion comprises a name of the stored object. But, it is well known and would have been obvious to a person of ordinary skilled in the art at the time the invention was made to process the request based on the rule that addresses the name of the object. Therefore, Official Notice is taken to indicate that the criteria including the name of the stored object is obvious and well known in the art. One of ordinary skilled in the art would have been motivated because of the same reasons as set forth in claim 52.

6.   Claims 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hu

(hereinafter Hu, U.S. Patent No. 6,173,322 B1) in view of Blumenau et al. (hereinafter

Blumenau, U. S. Patent No. 6,421,711 B1) and further in view Abraham et al. (U.S. Patent No.

5,983,270).

        As per claim 57, Hu in view of Blumenau does not explicitly disclose the process

wherein the criteria comprises a naming extension of the stored object. Abraham explicitly

discloses the filtering rule comprising naming extension of the stored object (col. 45 L1-30).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the

invention was made to incorporate the teaching of Abraham as stated above with Hu in view of

Blumenau in order to provide a rule or policy based on the naming extension of the object. One

of ordinary skill in the art would have been motivated so that the requests or packets are filtered

according to most recent mapping information, which would have resulted in an robust and

efficient decision, and further would have controlled the network congestion and decreased

network latency.

        As per claim 58, Hu in view of Blumenau does not explicitly disclose the process

wherein evaluating the request based on criteria comprises determining whether a naming

extension matches an element in a statically-specified set of naming extensions. Abraham

explicitly discloses the process of determining whether a naming extension matches an element

in a statically specified set of naming extensions (col. 45 L1-30). Therefore, it would have been

obvious to a person of ordinary skilled in the art at the time the invention was made to

incorporate the teaching of Abraham as stated above with Hu in view of Blumenau in order to

determine whether a naming extension matches with the statically specified set of naming

extension. One of ordinary skilled in the art would have been motivated because of the same

reason as set forth in claim 57.

As per claim 59, Hu in view of Blumenau does not explicitly disclose the process

wherein the statically-specified set of naming extensions is specified by an administrator using a

configuration interface. Abraham discloses a graphical user interface where system administrator

is provided with the configuration interface for specifying file type policy by identifying file

extensions (col. 11 L26-51). Therefore, it would have been obvious to a person of ordinary

skilled in the art at the time the invention was made to incorporate the teaching of Abraham in

order to provide a configuration interface for specifying the rules and policies based on naming

extensions. One of ordinary skilled in the art would have been motivated because it would have

allowed an administrator to establish policies through the graphical user interface.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

    a.   Goldman U.S. Patent No. 6,611,866 B1.

    b.   Chow et al., U.S. Patent No. 6,029,175.

    c.   Hinrichs et al., U.S. Patent No. 6,026,431.

    d.   Sim, Pub. No.: US 2003/0031176 A1.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-

5863. The examiner can normally be reached on Flex schedule 8 hr days (10.00am-6.30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 20, 2005.

ZARNI MAUNG
SUPERVISORY PATENT EXAMINER